
LAO PDR

**National Health Specific Adaptation Plan to
Climate Change (HNAP) and national and subnational
development planning**

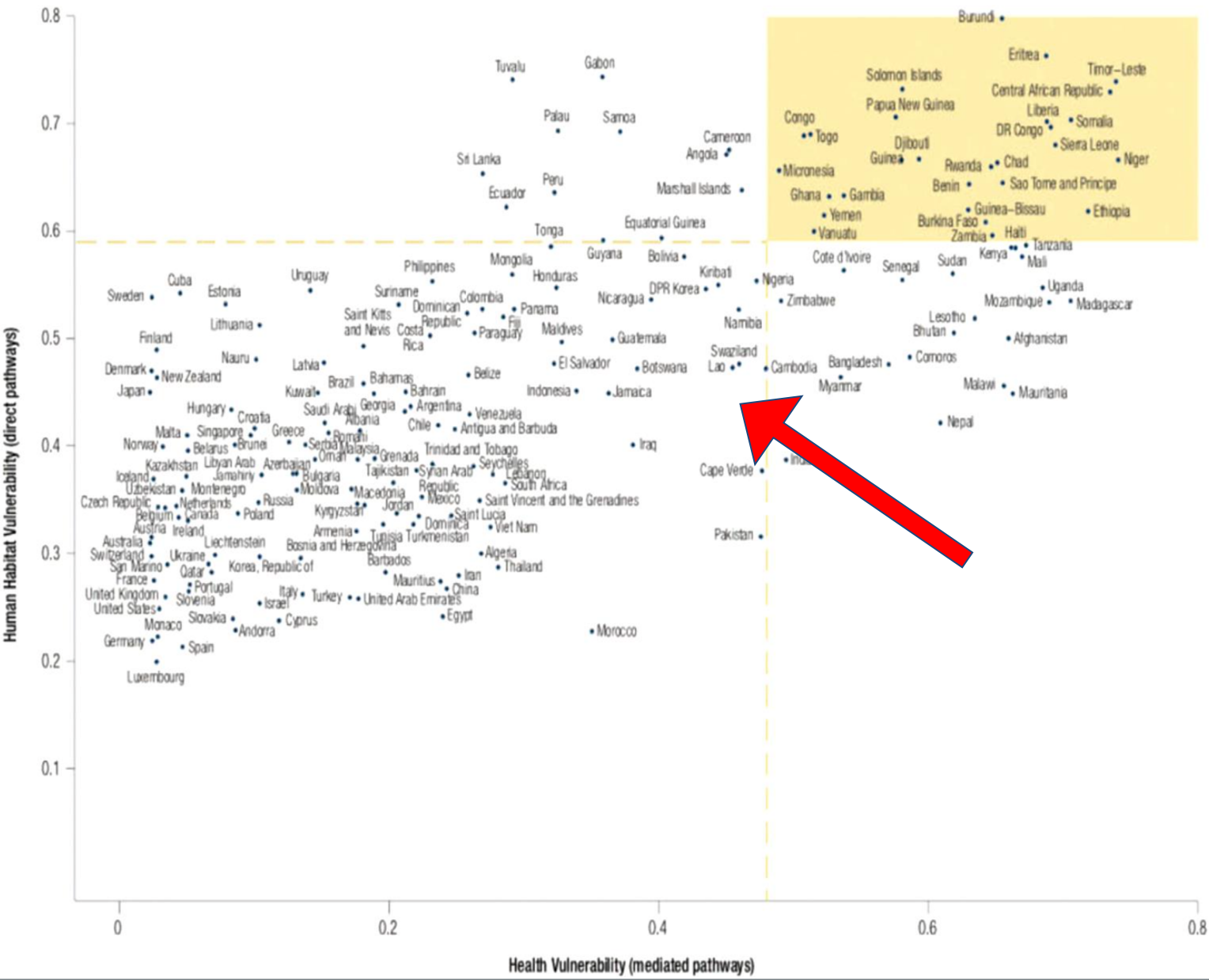
Presenter: Dr Oyuntogos Lkhasuren

Environmental health unit, WHO Country Office in Lao PDR

Co-presenter Dr Bouakeo, DDG, DHHP, MOH



**World Health
Organization**

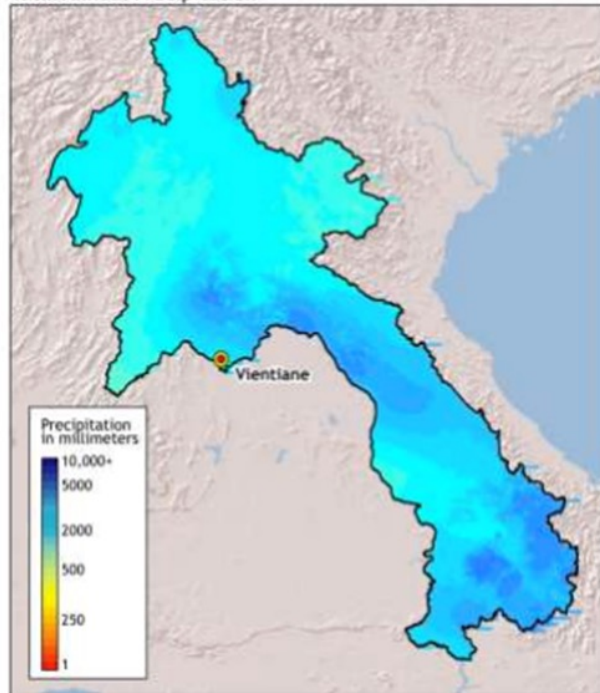


Lao PDR is one of the vulnerable country to climate change.

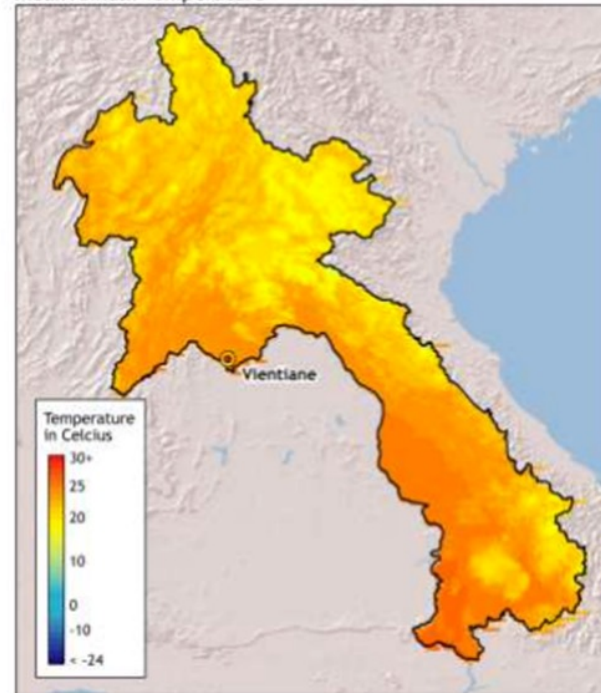
The most vulnerable countries are LDCs, SIDs.

Climate change in the country

Total Annual Precipitation

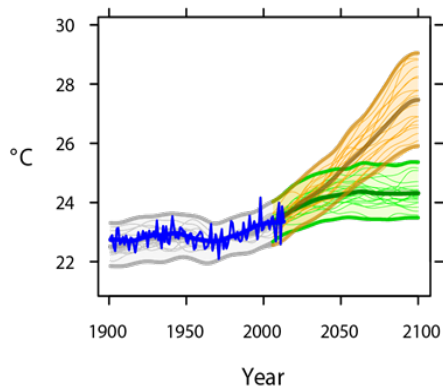


Mean Annual Temperature

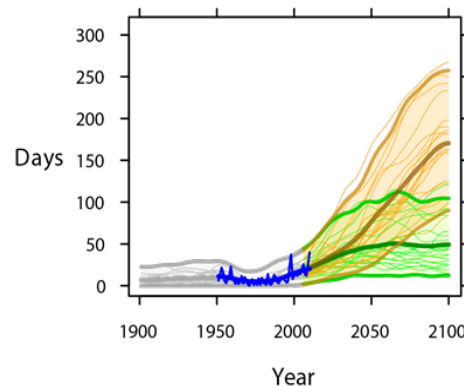


- **South:** mean annual rainfall (10–30%)
- **North:** flash floods
- **Flood:** rainy seasons shorter/more intense.
- **Droughts:** dry seasons are getting longer, hot spell

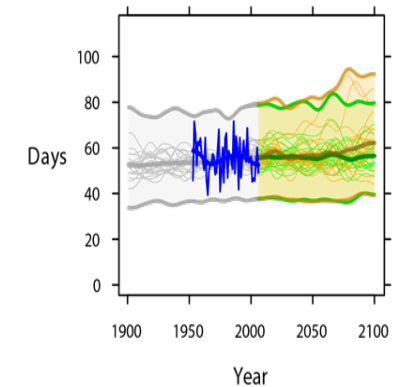
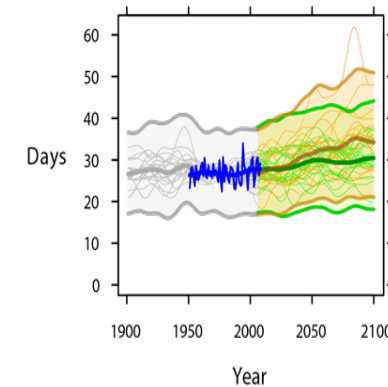
MEAN ANNUAL TEMPERATURE



DAYS OF WARM SPELL ("HEAT WAVES")



DAYS WITH EXTREME RAIN (20 mm OR MORE) AND LONGEST DRY SPELL



Under a high emissions scenario, mean annual temperature is projected to rise by about 4.6 °C on average from 1990 to 2100. If emissions decrease rapidly, the temperature rise is limited to about 1.4 °C.

Under a high emissions scenario, the number of days of warm spell is projected to increase from less than 10 days in 1990 to about 170 days on average in 2100. If emissions decrease rapidly, the days of warm spell are limited to about 50 on average.

Under a high emissions scenario, the number of days with very heavy precipitation (20 mm or more) could increase by about 8 days on average from 1990 to 2100, increasing the risk of floods. Some models indicate increases outside the range of historical variability, implying even greater risk. If emissions decrease rapidly, the risk is much reduced.

Under a high emissions scenario, the longest dry spell is indicated to increase by about 7 days on average, from about 55 days on average in 1990, with continuing large year-to-year variability. If emissions decrease rapidly, the increase is limited to less than 1.5 days on average.

Climate Change Impacts on Health in Lao PDR

- **Injury or death:** Increases in extreme weather events, resulting in increased risk of injury or death due to heat waves, flooding and drought.
- **The direct impacts of floodwater:** damage to housing, WASH, HCFs.
- **Heat-related deaths** among elderly people expected to increase to 72 per 100 000 by 2080 (3 per 100 000 worldwide in 1961–1990).
- **WDB:** increases in dry season and account for 11% of deaths among children under 5.
- **Dengue:** Increase vector borne diseases, especially dengue
- **Undernutrition:** Agricultural losses due to changing weather patterns will affect food security and put rural populations at risk of under nutrition.

National Development plan and Existing Climate Change Strategies

The National Socio-Economic Development Plan

- CC mitigation and adaptation is one of the national priorities

Nationally Determined Contributions (NDC): 4 priority sectors

- Agriculture, forestry, water and water resources, and health.
- Strategy on CC (2010) and Action Plan for 2013-2020, MONRE

National CC Strategy : Public health is priority

The NAPA CC (2009): urgent needs and short term capacity

- Agriculture, forestry, water and water resources, and health

National adaptation plan, under revision

CCH Strategy and Adaptation Plans to strengthen health system resiliency

- **National Determined Contribution (NDC, Lao PDR) update: included CCH Strategy and Adaptation Plans**
- **Lao MOH CCH Strategy: to build climate resilient health system (2018-2023)**
 - **Current and further climate impacts on health assessed by MOH**
 - **Most vulnerable 14 districts identified in 2020**
- **Health specific Adaptation Plans (HNAP) guided by CC Strategy draft:**
 - **Adaptive options designed for PHC, WASH, Health Care Facility and Community Resiliency in 14 districts**
 - **Establishing national/subnational adaptive capacity (GEF UNDP WHO project (2019-2023))**

HNAP is intended to provide support for

- defining health adaptation needs based on current and further health effects of climate change and
- developing medium and long term health adaptation plan for 2020-25 (9th HSDP) for increasing climate resilience capacity to assess, and manage climate related health outcomes in the country.

3 GOOD HEALTH AND WELL-BEING

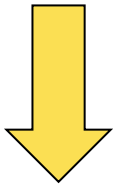


13 CLIMATE ACTION



Aligning H-NAP with national process

NDC - CC Strategy/NAP (MONRE)



CCH strategy/H-NAP

Other sectors

- **U-WASH**
- **DRR**
- **AGC**



Operational level:

- **R WASH and ENH**
- **Disaster preparedness and response**
- **HISM/Surveillance/early warning**
- **PHC etc**



H-NAP development process guided by CCH Strategy

Q1-2 2020 Q3-Q4 2020

Q1-2 2021

Q3/Q4/2021



Priority climate-sensitive health outcomes explored included in the Lao HNAP:

- Based on current and further climate and health impacts and VA results:
- Water-borne diseases (diarrhoea, typhoid) and effects on water, sanitation and hygiene
- Impacts from extreme weather events including under-nutrition, food insecurity, and sudden increase of health service demand
- Heat related medical condition
- Vector-borne diseases (dengue)



Implementation of the HNAP: medium and long term health sector development planning

- HNAP includes adaptation measures that recommended to be reflected in
 - central,
 - provincial,
 - district and
 - health facility level action plans for medium-long term capacity building
- Increasing cross programme coordination and incorporating climate variables and adaptation measures into ongoing
 - climate sensitive disease programmes,
 - Urban and rural WASH strategies and action plans is important.
- The HNAP specified for the DHIS2 system to be used as the platform for the climate data integration to health outcomes for early-warning system implementation.

Budget plan includes government and climate finance

